N U M B E R 15

Environmental and Social Stress Factors, Governance, and Small Arms Availability: The Potential for Conflict in Urban Areas

Michael Renner

Project on Urbanization, Population, Environment, and Security.
Supported by the U.S. Agency for International Development through a cooperative agreement with the University of Michigan's Population Fellows Program.

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

WASHINGTON, D.C., 1998

Comparative Urban Studies
Occasional Papers Series

This publication is one of a series of Occasional Papers on Comparative Urban Studies of the Woodrow Wilson International Center for Scholars. The series includes papers in the humanities and social sciences from Fellows, Guest Scholars, workshops, colloquia, and conferences. The series aims to extend the Center's discussions of urban issues to a wider community in Washington and throughout the world, and to provide, directly or indirectly, scholarly and intellectual context for contemporary policy concerns.

Single copies of Occasional Papers may be obtained without charge by writing to:

The Comparative Urban Studies Project
Woodrow Wilson International Center for Scholars
One Woodrow Wilson Plaza
1300 Pennsylvania Avenue, NW
Washington, DC 20004-3027

(202) 691-4235
CUSP@WWICS.SI.EDU
www.wilsoncenter.org

Comparative Urban Studies
at the Wilson Center

Blair A. Ruble and Joseph S. Tulchin, Co-Chairs
Christina Rosan, Project Coordinator
Sabine Salandy, Project Intern
Luba Shara, Project Intern

Since the Comparative Urban Studies Project's inception in 1991, we have sought to link sound academic scholarship and policymaking through international conferences, Guest Scholarships, and publications. Using a multidisciplinary, multiregional approach to urban studies, the Project engages experts from around the world in a substantive evaluation of urban practice.

Environmental and Social Stress Factors, Governance, and Small Arms Availability: The Potential for Conflict in Urban Areas

Michael Renner
Senior Researcher, Worldwatch Institute
Washington, D.C.

Introduction

Urbanization continues at a rapid clip, and with it grows the urban challenge. Since 1950 the number of people living in urban areas has jumped from 750 million to 2.64 billion. Each year, 61 million people are added to cities worldwide, or more than one million per week. By 2025, urban areas are expected to comprise more than five billion people (Mitchell 1998a). Through rural-to-urban migration, natural increase within cities, as well as the transformation of villages into new urban areas, city dwellers now account for 46 percent of the global population, up from less than 30 percent in 1950. More than half of humanity will reside in cities within a decade, according to UN estimates (ibid.). About 90 percent of the projected urban growth over the next quarter-century will occur in developing countries (World Resources Institute 1996). In the 1950s, just 17 percent of Third World inhabitants lived in urban areas, rising to 37 percent in the early 1990s, and an expected 57 percent by 2025 (Chege 1995).

Today, there are 326 cities with more than one million inhabitants; fourteen of them--expected to be joined by another six by the turn of the century--are "megacities," home to at least ten million people. Almost all of these are in the developing world, and they have acquired, or are acquiring, this status with unprecedented speed. Mexico City, for instance, grew from eight million residents to fifteen million in just sixteen years. But megacities with megaproblems may unduly overshadow the rest of the urban realm: they account for just 10 percent of all urban dwellers, while cities with less than one million people account for close to two-thirds of the total.

The rural poor continue to be lured to cities by the promise of jobs, better education, or improved services--though sometimes they are simply compelled to move. But according to a recent study by the U.S.-based Population Council, the quality of life in many urban centers of the developing world is poorer today than in rural areas. Partly because of continued large-scale influxes of people, cities experience high levels of homelessness and unemployment, pollution and congestion, the loss of agricultural land, and the accumulation of waste.

This paper attempts, in broad outline, to identify trends and dynamics that have a bearing on the potential for triggering or aggravating political, communal, and criminal violence in urban contexts. In doing so, it is important to distinguish between sets of factors that (a) have their origin in rural areas but nevertheless impact urban areas, principally by

forcing or inducing people to migrate from the countryside into cities--either domestically or across international borders--and hence swelling the size of cities, and (b) those that are generated or at work within urban areas themselves.

Among the first set of issues, a key factor is environmental decline and the resulting resource scarcity--principally water scarcity, erosion and degradation of arable land, and deforestation--that forces peasants and pastoralists to abandon their fields and grazing grounds and often induces them to migrate to urban areas. These factors are often tightly entwined with population growth and unequal access to land, water, and agricultural credit and extension services. Also, in some cases the rural population is not uprooted by adverse circumstances, but rather is expelled by powerful farming, ranching, and resource extraction interests.

Among the second set of issues are the lack of adequate services to meet such basic human needs as housing, sanitation, potable water supplies, education, employment, and so on. Particularly in cities of the developing world, sheer numbers--the rapid expansion of urban populations--overwhelm the ability of city administrations to provide needed human services. Rising inequalities greatly exacerbate these problems, as class differences tend to be more visible and glaring in dense conglomerations than in rural settings.

I. Forces that Cause Migration to Urban Areas

Environmental Stress Factors

The rapid degradation and depletion of natural systems is an important source of insecurity and stress in many societies, whether in the form of reduced food-growing potential, adverse health impacts, or diminished general habitability. Although soil erosion, desertification, deforestation, and water scarcity are worldwide phenomena, the human impact is most pronounced and most immediate in regions that encompass fragile ecosystems (such as arid or semiarid zones) and that have an economy heavily geared to agriculture. Natural support systems may be weakened to the point that rural families and communities find it harder and harder to sustain themselves, eventually forcing them to abandon their fields and homes.

Land degradation poses a major challenge--principally through the plowing of highly erodible land, the overgrazing of rangelands, and the loss of arable land, rangeland, and forests to expanding urban needs. According to UN Environment Programme (UNEP) estimates at the beginning of the 1990s, some 3.6 billion hectares--nearly a quarter of the earth's land area, or about 70 percent of potentially productive drylands--are affected by desertification (Bächler 1994).

One third of all agricultural land is lightly degraded, half is moderately degraded, and 16 percent strongly or extremely degraded (Oldeman, September 21, 1995; Gardner 1995). The annual loss of productive land amounts to some six to seven million hectares. Loss of topsoil is so severe that in the absence of remedial action, nearly two thirds of all cropland worldwide will perform below its potential in the next four decades (Gardner 1996a). The portion of agricultural land affected by soil degradation comes to 65 percent in Africa, 45 percent in South America, 38 percent in Asia, and 25 percent in North America and Europe. Some four hundred million poor people live in rural, ecologically fragile areas of the developing world (Oldeman, April 12, 1996; Gardner 1996b; Bächler 1994).

Water, like cropland, is a fundamental resource for human well-being--for food production, health, and economic development. Yet in many countries it is an increasingly scarce resource, under threat of both depletion and pollution. Countries with annual supplies in the range of 1,000-2,000 cubic meters per person are generally regarded as water-stressed, and those with less than 1,000 cubic meters are considered water-scarce. More than 700 million people live in countries whose per-capita supplies are at or below the level where food self-sufficiency is problematic. Some 230 million people live in the twenty-six countries that are most water-scarce (see Table 1). As water demand grows with population and economic development, their ranks are expected to swell (Postel 1992).

Many rivers and aquifers--and not just in countries with acute water scarcity--are overexploited. Excessive withdrawal of river and groundwater leads to land subsidence, intrusion of salt water in coastal areas, and desiccation of lakes. As groundwater is drawn at a rate surpassing natural replenishment, water tables decline. Eventually, the water becomes too costly to continue pumping, too saline for irrigation purposes, or is depleted altogether. Aquifer depletion due to overpumping is occurring in crop-growing areas around the globe, including regions of China, India, Mexico, Thailand, northern Africa, and the Middle East (Postel 1992, 1996). With these trends come growing pressures for people to abandon farming and migrate to urban areas.

The already observable patterns of environmental degradation are likely to be compounded by climate change. Changing precipitation patterns, shifting vegetation zones, and rising sea levels caused by global warming threaten to disrupt crop harvests, inundate heavily populated low-lying coastal areas, intrude estuaries and coastal aquifers with salt water, and undermine biological diversity. A hotter climate could trigger an increase in heat waves, hurricanes, floods, droughts, fires, and pest outbreaks in some regions; more extreme climates in desert zones; a rise in the number of heat-related deaths and illnesses;

and expansion in the reach of vectorborne infectious diseases such as malaria, yellow fever, dengue fever, and viral encephalitis (Flavin 1996).

Global warming could cause sea levels to rise anywhere from 15 to 94 centimeters during the next century (and more thereafter), with a current best estimate of about 50 centimeters (Watson, Zinyowera, and Moss 1996:ch. 9). River deltas and coastal areas around the globe affected by global warming include the Yangtze, Mekong, and Indus in Asia; the Tigris and Euphrates in the Middle East; the Nile, Zambezi, Niger, and Senegal in Africa; the Orinoco, Amazon, and La Plata in South America; the Mississippi in North America; and the Rhine and Rhone in Europe (Stevens 1995).

The low-lying areas most at risk--both urban and rural--are precisely the places with some of the densest human settlements and the most intensive agriculture. All in all, UNEP anticipates that sea level rise, along with amplified tidal waves and storm surges, could eventually threaten some five million square kilometers of coastal areas worldwide. Though accounting for only 3 percent of the world's total land, these areas encompass one third of all croplands and are home to more than a billion people. The Intergovernmental Panel on Climate Change (IPCC) points out, for example, that almost 10 percent of the world's rice production, feeding more than two hundred million people, takes place in areas of Asia that are considered vulnerable to sea level rise (Watson, Zinyowera, and Moss 1996; Myers 1993).

Global warming's impact on agriculture--through rising seas, higher or more variable temperatures, more frequent droughts, and changes in precipitation patterns--is indeed a major concern. Higher temperatures mean greater evaporative losses and hence faster desiccation of soils. The effects would be highly uneven, with some areas benefiting from changes in temperature and alterations in the hydrological cycle, but others that now receive plentiful rainfall becoming substantially drier. Given current water shortages, agriculture in arid and semiarid areas is particularly vulnerable to climate change. This would include areas such as the Sahel, southern Africa, the Indian subcontinent, eastern Brazil, and Mexico (Gleick 1992).

Environmental degradation, enhanced and intensified by climate change, is likely to continue to uproot sizable populations; many will end up migrating to urban areas. As they seek new homes and livelihoods in already crowded cities, they may clash with unwelcoming host communities, and cities will be hard pressed to cope with the added demand for services and jobs.

Demographic Factors

By simple arithmetic, population growth means that, all else being equal, the claim on natural resources increases. More mouths have to be fed, which means that more land--less productive or even unsuitable land--needs to be plowed, more irrigation is required, land use needs to be intensified, and fallow periods shortened or abandoned. Greater efficiency and improved techniques may offset part of these pressures and food-growing yields can be boosted (indeed, world grain yields per hectare have increased by a factor of 2.5 since 1950 [Brown 1995]). Yet on the whole the environmental impact rises and societies are pushing against the limits.

Where arable land is limited, a growing population implies that plots of land tend to get smaller and smaller as they are passed along from one generation to another and subdivided among the heirs. This in turn makes it more difficult for rural families to feed

themselves and increases the pressure to find other means of sustenance or to abandon farming and move to the city instead. Where rural jobs are scarce, this tendency is being reinforced.

Equity Issues in an Era of Globalization

Rural dynamics and rural-urban migration are not governed just by simple arithmetic. In a world in which wealth and power are distributed in a highly unequal manner, per-capita figures of arable land and other resources tell only part of the story--and may even obscure the key factors and pressures. In most developing countries, where agriculture is a mainstay of the economy and key to people's livelihoods, access to land is a crucial indicator. Landless and near-landless peasants are being forced onto marginal lands by unequal land distribution, the lack of secure land tenure, the marginalization of small-scale agriculture by cash-crop operations, the conversion of land to cattle ranching, and still-high rates of population growth. In 1981, an estimated 167 million households (comprising 938 million people) were landless or near-landless, and their numbers are expected to increase to nearly 220 million (or more than 1.2 billion people) by the turn of the century (Durning 1989).

Many of the landless and land-poor are forced to migrate to more marginal areas, such as hillsides and rain forests, that are susceptible to erosion and whose soils are quickly exhausted. In Mexico, for example, more than half of all farmers are eking out a living on land on steep hill slopes that now account for one fifth of all Mexican cropland (Myers 1993). Others turn to seasonal or permanent wage labor on large agricultural estates; many others end up seeking new livelihoods in already crowded cities (see Table 2).

Unequal landownership is of course nothing new--in Latin America, it is an enduring legacy of colonialism; but in more recent years the mechanization of agriculture in some areas has led to the eviction of millions of small peasants and sharecroppers by commercial farmers--as is the case in Sudan (Suliman 1992). The Institute for Development Studies in the United Kingdom estimates that 90 percent of the marketable agricultural production in Sudan is controlled by fewer than 1 percent of its farmers (Prendergast 1992).

In an age in which agriculture is increasingly being subjected to globalization, governments in many developing countries have decided to give priority access to fertile land and water to the larger commercial cash crop producers (who are typically more oriented toward lucrative export markets and urban markets for nonstaple and perhaps even nonfood crops) to the detriment of the numerically much larger subsistence or small-scale commercial farmers. In the Jodhpur

district of Rajasthan, India, increasing use of scarce groundwater to cultivate chili peppers and other water-intensive cash crops has caused village wells used by the rural poor to go dry and village communities to fall

apart (Postel 1992, 1996). Similarly, in Colombia, flower production for foreign markets has caused groundwater levels to fall, harming local food production (Launer 1994). In Senegal and Mali, fruit and vegetable export plantations were developed to the detriment of the peasant economy (Chossudovsky 1995).

In many countries, small farmers have been losing access to credit, extension services, and other forms of support, such as guaranteed prices. The 1994 edition of the *Human Development Report* (UNDP 1994) showed that in many developing countries, 40 percent of the people typically receive less than 1 percent of the total credit disbursed. In Chiapas, Mexico, 87 percent of agricultural producers were found in 1990 not to have any access to government credit (Chossudovsky 1995; Howard and Homer-Dixon 1996).

Many small commercial farmers and particularly subsistence peasants are struggling to survive and do not have the resources required to modernize and intensify their operations in order to compete in the brave new world of globalized agriculture. With import tariffs being lowered now that agriculture is to be opened up more to international trade, these producers increasingly compete with a flood of cheap grain imports. Although this development may be a boon to urban middle classes, it is devastating to many in rural areas. Some five million poor Brazilian peasant households, for example, see their very existence threatened in this manner (Stichele 1996): Brazil's wheat imports, which surged sixfold between 1988 and 1995, now supply 79 percent of the country's consumption (U.S. Department of Agriculture 1995). In Mexico, up to 80 percent of rural producers are potentially threatened by cheap imports (Renner 1997a).

Capital-intensive mechanized agriculture and other large-scale projects, such as dam-building and irrigation schemes, logging, mining, and oil and gas development, are uprooting millions of people--either by appropriating their lands or by undermining the natural systems they depend on for survival. Many of those displaced end up in urban areas. In the Sudan, mechanized agriculture projects drove out some 4.5 million peasants and pastoralists; many went to Khartoum, the capital (Suliman 1992). Large-scale irrigation projects and hydroelectric facilities often lead to the displacement of sizable local populations which, in turn, may lead to disputes among ethnic or economic groups (Gleick 1992). A study by the International Rivers Network found that the construction or expansion of 604 dams in 93 countries displaced at least ten million people during 1948-93, most of whom received no compensation or rehabilitation support. This is by no means a complete accounting, and the ranks of the displaced are continuing to swell with additional projects. A 1994 World Bank study put the current displacement toll of dams in developing countries at more than four million a year (Deutch Stiftung für Internationale Entwicklung 1995b; World Bank 1995; Kane 1995).

The implications for social stability are stark. The frictions between subsistence or near-subsistence peasants and commercial farms can lead to intensified social conflict in the countryside and in some cases to violent skirmishes. Or marginalized peasants, already facing environmental and demographic pressures, may join the trek to urban areas, where they add to the strain on infrastructure, social services, and jobs.

Population Movements

Large numbers of people are on the move each year--either voluntarily or under duress--and many of them move to urban areas. The first category of people on the move is migrants. The number of cross-border legal migrants is estimated to have reached about one hundred million worldwide, while illegal migrants are thought to number anywhere from another ten million to thirty million. More than one hundred countries are now experiencing major migration outflows or inflows, according to the International Labour Organisation. A quarter of these nations are simultaneously a source and recipient of migrants. Within countries, too, substantial flows of people are taking place, typically from rural to urban areas (an estimated twenty to thirty million people migrate to cities within their own country each year), and from poorer to more prosperous provinces (Kane 1995; UNHCR 1995).

The other category to consider in the present context is the flow of refugees. Although it is certainly true that not all refugees originate in the countryside and not all refugees seek asylum in cities, a substantial portion of them are part of the rural-urban migration picture. The number of people that, under international rules, qualified for and were given refugee assistance soared from slightly more than one million in the early 1960s to an estimated 27.4 million in 1995 before declining somewhat to 22.7 million in early 1997. But because official definitions of what constitutes a refugee and who therefore is eligible for assistance and protection are quite narrow, these statistics do not include all those forced to abandon their homes. UN High Commissioner for Refugees estimates that some thirty million people worldwide may be internally displaced, although its programs covered only slightly below five million in 1997 (UNHCR 1995; *Refugees Magazine* 1997; Mitchell 1998b).

These numbers are still conservative; they do not include people uprooted by environmental calamities or "oustees"--those displaced by large-scale infrastructure projects (including dam projects, as noted above). Over the past decade, for example, as many as ninety million people may have lost their homes to make way for dams, roads, and other "development" projects. In addition,

land degradation, water scarcity, and the threat of famine are powerful factors forcing people to move. The mid-1980s drought in the Sahel region, for instance, drove more than two million people out of Burkina Faso, Chad, Mali, Mauritania, and Niger. Desertification has uprooted one sixth of the populations of Mali and Burkina Faso. Many of these individuals ended up in cities and towns (Jacobson 1988; Kane 1995).

The potential for "environmental refugees" is far larger, though. As we have seen earlier, some four hundred million people live in ecologically fragile areas, eking a precarious living out of marginal soils; more than seven hundred million people are already affected

by water scarcity, a figure bound to grow. Adverse conditions may in future years force large numbers of them to move on, and often to move on with a city as their final destination.

Traditionally, a sharp distinction has been made between migrants and refugees. Migrants are thought to leave largely of their own choosing, "pulled" by the prospect of better jobs or higher earnings, whereas refugees are compelled to vacate their homes, "pushed" out by war, repression, or other factors beyond their control. But the categories are becoming blurred. People are increasingly leaving their homes for a mixture of reasons--involving both fears and hopes, both voluntary and involuntary influences. In some situations, migrants could be characterized as individuals who had the foresight to leave early, before local conditions deteriorated to the point where they were compelled to move--that is, before human rights violations become massive, before economic conditions turned wretched, or before environmental deterioration made eking out an existence impossibly burdensome (Suhrke 1993; Kane 1995).

The phenomena of migrants and environmental refugees can be observed on a massive scale in China, which now experiences enormous rural-urban flows of people within its borders. The reason can be found in the large and growing disparities of both environmental quality and economic development between China's poverty-stricken hinterland and its booming coastal provinces.

Vaclav Smil of the University of Manitoba points out that ten northern interior provinces, home to about 40 percent of China's population, account for almost 80 percent of the country's soil erosion and two thirds of its severe water shortages. The northern interior is characterized by arid lands, highly variable rainfall, and soil easily susceptible to erosion. These adverse natural conditions have been magnified by environmental mismanagement. Smil puts the number of Chinese peasants displaced by environmental degradation during the 1990s at twenty to thirty million, with at least another thirty to forty million uprooted by 2025--a figure that could be much higher if climate change becomes a full-blown reality (Smil 1992, 1995).

Where would these people go? Most likely to the southern and coastal provinces, putting immense pressure on local governments. Already in the past several years, the coastal cities have been swamped with unmanageable waves of unskilled peasant migrants seeking better economic opportunities--neither needed for farming nor employed by rural industries. China now has a "floating" population of job seekers estimated at more than one hundred million (ibid.).

Furthermore, the Chinese government is in the process of pruning state-owned industries in the country's northeast, causing millions of workers to lose their jobs. In many large cities, unemployment is believed by Western observers to be more than 20 percent (compared with an official 4 percent rate). Another thirty million workers are expected to be shed. Although the government is trying to build a new welfare system, it is also gambling that rapid economic growth will create enough new jobs for those laid off. According to a recent *New York Times* report, there are numerous scattered protests around the country by the unemployed. Although calls for independent labor unions are being heard, it remains to be seen whether these demands will coalesce into any serious movement. As China pursues its own brand of capitalism, income gaps are opening and becoming more visible between those who benefit from reforms and those who suffer the consequences. Laid-off urban workers are often competing for employment with migrants from rural areas (Eckholm 1997, 1998).

II. Social Stress Factors

Unequal Income Distribution

In many countries, we see a highly uneven distribution of the benefits of economic growth (or of the woes of economic contraction). Inequality, marginalization, and the resulting polarization in society appear to be on the march virtually worldwide. Even as economic growth has been strong, the gap between rich and poor has grown dramatically. In 1960, those in the top 20 percent had thirty times the income of those in the bottom 20 percent; by the beginning of the 1990s, they had almost sixty times as much (UNDP 1994; UNDPI 1996a, b). The world's 358 billionaires had a combined wealth of $762 billion in 1994--the equivalent of the income of 2.4 billion people, 45 percent of the global population (Arrudal 1995).

For many developing countries in Latin America and Africa, the sharp increases in what were already large social and economic discrepancies were a consequence of structural adjustment programs imposed by the International Monetary Fund and the World Bank since the early 1980s--in turn a consequence of these countries' severe foreign debt crisis. These programs typically require recipients of adjustment loans to implement measures such as lowering trade and investment barriers; devaluing the currency; reducing or eliminating subsidies, price controls, and social programs; and privatizing state enterprises (Heredia and Hellinger 1995). Privatization, deemphasis of social priorities, and the needs of debt servicing proved to be exceedingly bitter medicine for the poor and even for large parts of the middle class. Most people in highly indebted African and Latin American countries suffered a severe drop in living standards during the 1980s. Bread for the World (1996) notes that African governments

spend more than twice as much servicing their debts as they do on health and primary education combined.

A good deal of the global rich-poor gap is embodied in the persistent North-South disparity: the developing world accounts for three quarters of the world's population but has only 16 percent of global income. But huge gaps exist also within countries of both the South and the North (see Table 3.). Part of the domestic picture can be explained, of course, by urban-rural differentials; but within cities, too, discrepancies are high and rising.

As a group, Latin American countries have long displayed the most unequal income distribution in the world--disparities that grew even bigger during the 1980s and 1990s. As foreign capital pours into the region--a fourfold increase between 1990 and 1993 alone--in response to privatization, trade liberalization, and deregulation, new markets are emerging and new opportunities beckon (Deutch Stiftung für Internationale Entwicklung 1995a). Yet despite the upturn in macroeconomic indicators, the benefits are distributed highly unequally. Income distribution in the region remains more skewed now than it was before the start of the debt crisis (UNECLAC 1994) and the region's poverty rate is not expected to drop below its 1990 level of 46 percent; in fact, it may increase slightly (NAFTA 1995). The incomes of some 192 million Latin Americans are below the poverty line, and almost half these people are extremely poor; 130 million people are homeless or live in unfit housing structures (Nash 1994). A front-page *New York Times* headline in late 1994 summarized the situation well: "Latin Economic Speedup Leaves Poor in the Dust" (ibid.).

In Western industrial countries, too, inequality is on the rise. Some one hundred million people--more than 10 percent--live below the poverty line, and more than five million are homeless (UNDP 1995). Another one hundred million people in formerly Communist industrial countries live in poverty (UNDP 1991). In the United Kingdom, the income ratio between the top 20 and bottom 20 percent went from 4:1 in 1977 to 7:1 in 1991 (UNRISD 1994). In the United States, which has the widest income gap among industrial nations (UN 1994), it went from 4:1 in 1970 to 13:1 in 1993 (Dembo and Morehouse 1995).

Unmet Basic Human Needs

For people at the bottom of the global economic heap, particularly in developing countries, the day-to-day reality is typically one of innumerable hardships and chronic insecurity. They contend with meager incomes despite long hours of backbreaking work, insufficient amounts of food and poor diets, lack of access to safe drinking water, susceptibility to preventable diseases, and housing that provides few comforts and scant shelter. Despite undeniable improvements in living standards and health and education since mid-century, massive numbers of people, mostly in developing countries, remain mired in poverty, with some of their most basic needs unmet (see Table 4; UNDP 1991).

Safe drinking water and adequate sanitation illustrate this point. More than one billion people worldwide do not have access to safe drinking water, of which 170 million live in cities (Chege 1995; US Government Printing Office 1993:17). Although availability of sanitation grew in absolute terms, the share of developing-country populations with access to adequate sanitation nevertheless

fell from 36 to 34 percent between 1990 and 1994, and the unserved population grew by 274 million people--at a faster rate than during the 1980s. In urban Africa, the share of population with access to adequate sanitation fell from 65 to 55 percent between 1990 and 1994 (Gardner 1998). According to the WHO, half the population of developing countries suffers from one of six diseases (diarrhea and others) associated with poor water supply and sanitation. Although the greatest shortcomings are found in rural areas (some 2.3 billion lack adequate sanitation compared with 590 million in urban areas), the need for adequate sanitation is most urgent in cities because of the greater potential there for mass infections from pathogen-tainted water.

Unemployment

One key reason for rising inequality and poverty--and a major threat to social cohesion and stability--is found in what various observers have termed the global jobs crisis. Out of the global labor force of about 2.8 billion people, at least 120 million people are unemployed, while 700 million are classified as "underemployed"--a misleading term because many in this category are actually working long hours but receiving too little in return to cover even the most basic of needs (Marshall 1995; Barnet 1994; Kane 1995).

Unemployment, underemployment, the threat of job loss, and the specter of eroding real wages are challenges for many workers across the globe, through the particular conditions and circumstances diverge widely in rich and poor countries. Three phenomena can be observed. First, the rise of microelectronics has dramatically reduced the need for labor--particularly unskilled labor. Second, measures such as subcontracting work and temporary or part-time hiring allow companies to adapt rapidly to fast-changing market conditions but render job tenure more tenuous and insecure. Third, due to modern communications and transportation networks, the ability to parcel out components of the work process, and increased capital mobility, corporations are increasingly able to tap into a large pool of cheap labor in developing countries, replacing a much higher paid work force in the old industrial countries. Initially, unskilled or semiskilled jobs were at risk in this manner, but recent evidence suggests that skilled workers are now facing similar pressures (UNRISD 1994; Barnet 1994; Bradsher 1995; Uchitelle 1994).

Countries that embrace a low-wage strategy and "flexible" labor markets may be able to create more jobs than those countries that do not, but strong downward pressure on wages is associated with such policies, as evidence from the United States makes clear. Between 1973 and 1990, real wages for production or nonsupervisory workers (excluding agriculture) declined by more than 20

percent; despite recent gains, wages today have still not caught up with those prevalent in 1973 (Dembo and Morehouse 1995).

Many other industrial countries have not embraced the low-wage strategy--for fear of rapidly growing economic inequality among their populations and the implied threats to the social and political health of their societies. But in a globalizing economy, they face high and growing unemployment rates that not only burden the welfare state but gnaw at the foundations of social stability. In Western Europe, some 18 million people are out of work. In France and Germany, unemployment now runs at more than 12 percent--

postwar records. Among members of the Organisation for Economic Co-operation and Development (OECD), Japan alone has managed to keep joblessness low--at 3.9 percent in early 1998, this is nevertheless the highest it has been since the end of World War II (Marshall 1995; Andrews 1997; Whitney 1998; Cowell 1998a, b).

Increasingly, there is a gap among workers who, due to advanced technical and other skills, have relatively secure and well-remunerated jobs; workers whose hold on jobs is tenuous or who have marginal and poorly-paid jobs; and those who are now considered "unemployable" (because they are regarded as too old or as too unskilled). These divisions lead to growing polarization among the labor force and within communities.

The social and psychological impacts of unemployment, or the threat of loss of employment, are often traumatic for the affected individuals and their families. But on the societal level, failure to deal appropriately with sharpening social problems could have fatal political consequences. People whose hopes have worn thin, whose discontent is rising, and whose feelings of security have been stripped away are more likely to support extreme "solutions," and it is clear that some politicians stand ready to exploit the politics of fear.

The threat to job and wage security has already triggered two reactions: calls for protectionist policies against imports from countries where labor is cheap, and hostility toward immigrants seen as taking jobs or social benefits away from domestic workers. It matters less whether these perceptions are correct than that they are clearly helping to fan antiforeigner sentiments and hatreds that have led to violence and that can generate explosive social and political conditions.

Whereas Western countries have experienced a gradual rise in unemployment during the past two decades, the formerly Communist countries of Eastern Europe and the Soviet Union have had to contend with rapidly emerging mass unemployment and dramatic increases in poverty and inequality. They continue to undergo a wrenching and uncertain transition to what must seem like a highly uncertain future from a system that, although highly inefficient and even demoralizing, provided a sheltered kind of employment and a sense of steadiness. The ranks of the unemployed have grown rapidly (World Bank 1995; ILO 1995). Since the breakup of the Soviet Union, Russia has experienced six straight years of industrial decline. Payment of wages is lagging so far behind that workers and pensioners are now owed at least $10 billion. Millions of Russians are barely scraping by, and many took to mass protests in March 1997 (Specter 1997).

Unemployment, poverty, and the growing gap between rich and poor has fueled social conflict across Latin America. Strikes in Bolivia by workers pushing for an increase in wages and opposing the government's economic policies have grown in size in recent years. In 1995, the government imposed a state of emergency in response, and detained

union leaders (Sims 1996). Argentina has seen widespread and partly violent protests over high unemployment and poverty; unemployment is around 17 percent, and hundreds of thousands of jobs have been lost in recent years in the course of privatization (Sims 1997). Congressional elections in October 1997 brought defeat to the governing Peronist
party. Yet President Menem is proposing to do away with collective bargaining and seeking greater ease in hiring and firing (Cohen 1998b). In Brazil, bills were approved in early 1998 to strip down social security benefits and job protections (Cohen 1998c). Unemployment in the São Paulo area has risen from 10.2 percent in 1990 to 16.3 percent today. The crime rate is soaring, as is violence (Cohen 1998a).

Until recently, the dynamic economies of East and Southeast Asia experienced high growth in productivity, output, employment, and real wages. But in 1997, a number of countries in the region plunged into a serious crisis. South Korean unemployment went up to 12 percent in early 1998, a twelve-year high (*New York Times* 1998). In Thailand, forecasts say that two million people could lose their jobs by end of 1998. Many of the four million who came to Bangkok from the countryside (and who are still poor) during the past decade are affected. Economic growth in the past benefited primarily a small group. Half the country's wealth resides in the hands of the richest 10 percent of the population, making Thailand one of the five most unequal countries in the world (Mydans 1997).

In Indonesia, too, the severe economic crisis means that millions are losing their jobs. In February 1998, government officials raised their estimate of the country's unemployed by one-third, to 8.5 million, yet true unemployment is believed to be even higher, and growing rapidly. With social and economic suffering spreading, large-scale unrest is a real possibility. Numerous riots have already taken place in response to rising food and fuel prices and economic hardship. These factors are increasingly joined by anger at the lack of democratic, accountable governance and resentment against the ethnically-Chinese portion of Indonesia's population (Mydans 1998a, b; Landler 1998).

Economic crisis, unemployment, and urban unrest are beginning to translate into potential conflict across national boundaries. An estimated 1.2 million Indonesians are working in Malaysia, most of them illegally. As Malaysia deals with its own economic crisis, it has begun to expel illegal Indonesian laborers and decided not to renew work permits for those who are in the country legally. Thailand also has announced its intention to expel some three hundred thousand foreign workers (Mydans 1998c).

In Asia as in other developing societies, many of those unable to find regular jobs drift into the informal sector--the underbelly of the economy of many developing countries. But this area is characterized by low skills, productivity, and pay (though some talented entrepreneurs can do well), and offers no form of social protection. In Africa, the International Labour Organisation (ILO) finds that the majority of workers in the

informal sector would be very fortunate to earn even the official minimum wage. According to the ILO, in sub-Saharan Africa the informal sector employed more than 60 percent of the urban work force in 1990. Its share of the nonagricultural work force in Latin America rose from 40 to 53 percent during the 1980s (UN 1994, ILO 1993.)

Perhaps most unsettling is the reality of large-scale youth unemployment, which virtually everywhere is substantially higher than that for the labor force as a whole. One survey of fifteen African countries showed youth unemployment rates to be triple those for adults. Even in most industrial countries, youth unemployment is an enormous challenge: in the early 1990s, it reached 14 percent in the United States, 15 percent in the United Kingdom, 26 percent in Italy, and 36 percent in Spain. Japan and Germany are the exceptions, with rates of 5 and 6 percent, respectively (UNDPI 1996c; ILO 1993, 1995).

The world's labor force is projected to grow by almost one billion during the next two decades, mostly in developing countries hard-pressed to generate anywhere near adequate numbers of jobs (Kane 1995). During the 1990s, an additional 38 million people will seek employment each year in these countries (UN 1994). High rates of population growth and the resulting disproportionately large share of young people in many developing countries translate into much greater pressure on job markets there. Roughly 20 percent of the population in industrial countries is age fifteen or younger. But in China, the figure is 27 percent; in Latin America, 34 percent; in South and Southeast Asia, 38 percent; and in Africa, 45 percent (Population Reference Bureau 1995). The uncertain prospects that many young adults face are likely to provoke a range of undesirable reactions: they may trigger self-doubt and apathy, cause criminal or deviant behavior, feed discontent that may burst open in street riots, or foment political extremism (UNDPI 1996c; Gizewski and Homer-Dixon 1995).

Inequality, poverty, and lack of opportunity are, of course, nothing new. But today's polarization is taking place when traditional support systems are weakening or falling by the wayside. In developing countries, there is an erosion of the bedrock of social stability--the webs and networks of support found in extended family and community relationships (although these are admittedly often paternalistic and exploitative). It is unclear what will take its place.

III. Small Arms Proliferation and the Potential for Violence

The ability of different societies to cope with urban challenges varies considerably, depending to a considerable degree on their ability to counter--to mitigate and reduce--the environmental, social, and economic pressures

discussed earlier. This may to a large extent be a question of the resources and capacities that are available to them. But they will also be better able to respond and cope if the social resilience--the strength and cohesion of the communal fabric--is strong.

Gross disparities in wealth and power and ability to cope with life's pressures tend to tear at the fabric of society and lead to polarization. If profound social and economic grievances are unable to find expression or are ignored, they may assume violent forms. Governments do not always show themselves capable of dealing adequately with accelerating political, social, economic, and environmental pressures, and disputes fester; in the worst cases, they may even be tempted to exploit the resulting divisions for their own benefit in divide-and-rule fashion. Particularly where the legitimacy and effectiveness of political institutions is shaky, people will try to find support, identity, and security in the immediate group they belong to or feel kinship with. But as diverse groups and communities step into the breech, they will almost inevitably be in competition with each other. As zero-sum thinking prevails, societies splinter and tensions build.

These developments do not have to lead to violence. But increasingly, societies are suffering from the broad dispersal of small arms--firearms of both civilian and military type. There is growing, if belated, recognition of the dangers inherent in this proliferation. These weapons filter through all levels of society--to armed opposition groups, drug traffickers, organized crime, terrorists, private security forces, paramilitary groups, and vigilante squads. To the extent that ordinary citizens feel that the state fails to provide them with a sense of security, they, too, are increasingly arming themselves.

Small arms are infecting many communities and particularly urban conglomerations, where they encourage the impulsive, habitual, or deliberate use of violence for power, profit, and vengeance. Empowering those least hesitating to use violent means to act with impunity, the dispersal of small arms not only fuels widespread violence and escalates minor disputes into potentially major carnage, but it also debilitates societies by obstructing social and economic development and by hindering efforts to address the political, social, economic, and environmental challenges of today.

Because there has to date been little effort to track and control these types of weapons, no one really knows the quantities of small arms in circulation, or even the number that are added from new production each year. Ownership--whether by institutions or individuals--is widespread in many countries. Only a portion of all firearms are held legally, and only a portion of legally-held firearms are registered. A weapon produced and sold legally may at some point

fall into the "wrong" hands and become an illegal weapon. Hence, any global figures can be little more than educated guesses. One analyst put the number of military-style firearms in worldwide circulation at five hundred million. In all likelihood, civilian-type firearms also number in the hundreds of millions. There are at least three companies in fifty-two countries that are manufacturing small arms and related equipment. All in all, worldwide production easily runs to several millions, if not tens of millions, of units each year. A plethora of legal and illegal trading networks spread arms--both newly produced weapons and "recycled" weapons of war--far beyond the borders of the producer countries.

Cities in such disparate countries as El Salvador, South Africa, Pakistan, Mexico, or Russia, to cite only some examples, have seen a tremendous upsurge of violence. This includes personal revenge deeds, "survival" crimes committed by desperate individuals, gang and organized crime violence, and hostilities between feuding communities. But the broader background can be seen as the severe lack of urban services, resources, and opportunities; social disorder; and the pain of wrenching economic transformations. All of these provide fertile ground for violent responses.

In consequence, urban policy needs to concern itself not only with an array of social, economic, and environmental issues, but also needs to address the challenge of small arms dispersal (Renner 1997b).

Table 1. Selected Water-Scarce Countries, 1990 and 2025

Water Supply

(cubic meters per person)

Country	***1990***	***2025***
Nigeria	2,660	1,000
Ethiopia	2,360	980
Iran	2,080	960
Peru	1,790	980
Haiti	1,690	960
Somalia	1,510	610
South Africa	1,420	790
Egypt	1,070	620
Rwanda	880	350
Algeria	750	380
Kenya	590	190
Israel	470	310
Jordan	260	80
Libya	160	60
Saudi Arabia	160	50

SOURCE: Gleick (1992).

Table 2. **Land Distribution and Landlessness, Selected Countries or Regions**[a]

Country/ Region	***Observation***
Brazil	Top 5 percent of landowners control at least 70 percent of the arable land; the bottom 80 percent have only 13 percent of the cultivable area; 12 million rural Brazilians are landless or near-landless, yet enough land is currently left idle by large landowners to provide the 12 million with more than 2 hectares of land each.
Peru	Three quarters of the rural population is landless or near-landless.
Central America	In Guatemala, 2 percent of farmers control 80 percent of all arable land; in Honduras, the top 5 percent occupy 60 percent; in El Salvador, the top 2 percent own 60 percent, and almost two thirds of the farmers are landless or nearly landless; in Costa Rica, the top 3 percent have 54 percent of the arable land.
India	40 percent of rural households are landless or near-landless. The 25 million landless households in 1980 are expected to reach 44 million by the end of the century.
Philippines	3 percent of landowners control one quarter of the land; 60 percent of rural families have no or too little land.

[a]Near-landlessness means that a rural family or household possesses too little land to sustain its members' livelihoods with farming alone.

SOURCE: Myers (1993); UNDPI (1996a); Stichele (1996).

Table 3. **Ratio of Richest 20 Percent of Population to Poorest 20 Percent in Selected Countries, 1981-92**

South Africa	45
Brazil	32
Guatemala	30
Senegal	17
Mexico	14
United States	13[a]
Malaysia	12
Zambia	9
Algeria	7
China	7
South Korea	6
Germany	6
India	5
Japan	4

[a]Data for 1993.

SOURCE: UNDP (1995); Dembo and Morehouse (1995).

Table 4. **Dimensions and Magnitude of Human Insecurity, Early 1990s**

Source of Insecurity	***Observation***
Income	1.3 billion people in developing countries live in poverty; 600 million are considered extremely poor; in industrial countries, 200 million people live below the poverty line.
Clean Water	1.3 billion people in developing countries lack access to safe water.
Literacy	900 million adults worldwide are illiterate.
Jobs	820 million people worldwide are unemployed or underemployed.
Food	800 million people in developing countries have inadequate food supplies; 500 million of them are chronically malnourished, and 175 million are children under the age of five.
Housing	500 million urban dwellers worldwide (roughly one out of every five) are homeless or live in inadequate housing; 100 young people are homeless ("street children").
Preventable Death	15-20 million people die each year due to starvation and disease aggravated by malnutrition; 10 million people die annually due to substandard housing, unsafe water, and poor sanitation in densely populated cities.

SOURCE: UNDP (1991, 1994, 1995); UNDPI (1996a, b, c); UNRISD (1994); UN (1996).

BIBLIOGRAPHY

Andrews, Edmund L. 1997. "The Jobless Are Snared in Europe's Safety Net." *New York Times,* November 9.

Arrudal, Marcos. 1995. "Education for Whose Development?" in the APC electronic conference igc:econ.saps, November 18.

Barnet, Richard J. 1994. "Lords of the Global Economy." *The Nation*, December.

Bradsher, Keith. 1995. "Skilled Workers Watch Their Jobs Migrate Overseas." *New York Times*, August 28.

Bächler, Günther. 1994. "Desertification and Conflict: The Marginalization of Poverty and of Environmental Conflicts." *Occasional Paper No. 10.* Bern, Switzerland: Environment and Conflicts Project (ENCOP). March.

Bread for the World. 1996. "Easing Africa's Debt Burden," in the APC electronic conference igc:africa.news, March 6.

Brown, Lester R. 1995. "Grain Yield Remains Steady," in Lester R. Brown, Nicholas Lenssen, and Hal Kane, *Vital Signs 1995.* New York: W.W. Norton & Co.

Chege, Nancy. 1995. "Access to Safe Water Expands," in Lester R. Brown, Nicholas Lenssen, and Hal Kane, *Vital Signs 1995.* New York: W.W. Norton & Co.

Chossudovsky, Michel. 1995. "The Causes of Global Famine," in the APC electronic conference igc:dev.worldbank, October 16.

Cohen, Roger. 1998a. "Brazil Pays to Shield Currency, and the Poor See the True Cost." *New York Times*, February 5.

_____. 1998b. "Argentina Sees Other Face of Globalization." *New York Times*, February 6.

_____. 1998c. "Brazil Congress Votes to Scale Down Social Security Benefits." N*ew York Times*, February 13.

Cowell, Alan. 1998a. "Germans Protest as Unemployment Reaches a Postwar Record." *New York Times*, February 6.

_____. 1998b. "Unemployment Rate in Japan Up to 3.9%." *New York Times*, April 28.

Dembo, David and Ward Morehouse. 1995. *The Underbelly of the U.S. Economy*. New York: Apex Press.

Deutsche Stiftung für Internationale Entwicklung (German Foundation for International Development, Frankfurt Germany), *Development & Cooperation*. 1995a. "New Debt Crisis in Latin America?" May/June.

_____. 1995b. "What Future for Large Dams? November/December.

Durning, Alan B. 1989. "Poverty and the Environment: Reversing the Downward Spiral." *Worldwatch Paper 92*. Washington, D.C.: Worldwatch Institute, November.

Eckholm, Erik. 1997. "Chinese Democracy Campaigners Push for Free Labor Unions." *New York Times*, December 24.

_____. 1998. "Joblessness: A Perilous Curve on China's Capitalist Road." *New York Times*, January 20.

Flavin, Christopher. 1996. "Facing Up to the Risks of Climate Change," in Lester R. Brown et al., *State of the World 1996*. New York: W.W. Norton & Company.

Gardner, Gary. 1995. Worldwatch Institute, Washington, D.C., private communication, September 21.

_____. 1996a. "Preserving Agricultural Resources," in Lester R. Brown et al., *State of the World 1996*. New York: W.W. Norton & Company.

_____. 1996b. Worldwatch Institute, Washington, D.C., private communication, April 12.

_____. 1998. "Sanitation Access Lagging," in Lester R. Brown, Michael Renner, and Christopher Flavin, *Vital Signs 1998*. New York: W.W. Norton & Co.

Gizewski, Peter and Thomas Homer-Dixon. 1995. "Urban Growth and Violence: Will the Future Resemble the Past?" The Project on Environment, Population, and Security, American Association for the Advancement of Science and University of Toronto.

Gleick, Peter H. 1992. "Water and Conflict," in *Occasional Paper No. 1, Project on Environmental Change and Acute Conflict*, American Academy of Arts and Sciences and University of Toronto, September.

Heredia, Carlos and Steve Hellinger 1995. "Getting to the Root of the Mexico Crisis," in the APC electronic conference igc:twn.features, September 25.

Howard, Philip and Thomas Homer-Dixon. 1996. "Environmental Scarcity and Violent Conflict: The Case of Chiapas, Mexico." The Project on Environment, Population, and Security. American Association for the Advancement of Science and University of Toronto, January.

International Labour Organisation. 1993. *World Labour Report 1993*. Geneva.

_____. 1995. *World Labour Report 1995*. Geneva.

Jacobson, Jodi L. 1988. "Environmental Refugees: A Yardstick of Habitability." *Worldwatch Paper 86.* Washington, D.C.: Worldwatch Institute, November.

Kane, Hal. 1995. "The Hour of Departure: Forces That Create Refugees and Migrants." *Worldwatch Paper 125.* Washington, D.C.: Worldwatch Institute, June.

Landler, Mark. 1998. "Unrest Deepens in Indonesia, But Suharto Offers Defiance."

New York Times, May 10.

Launer, Ekkehard. 1994. *Zum Beispiel Blumen*. Göttingen, Germany: Lamuv Verlag, December.

Marshall, Ray. 1995. "The Global Jobs Crisis." *Foreign Policy*, Fall.

Mitchell, Jennifer D. 1998a. "Urban Areas Swell," in Lester R. Brown, Michael Renner, and Christopher Flavin, *Vital Signs 1998.* New York: W.W. Norton & Co.

_____. 1998b. "Refugee Flows Drop Steeply," in Lester R. Brown, Michael Renner, and Christopher Flavin, *Vital Signs 1998.* New York: W.W. Norton & Company.

Mydans, Seth. 1997. "Thailand Economic Crash Crushes Working Poor." *New York Times,* December 15.

_____. 1998a. "Newly Jobless (and Newly Angry) Upset Indonesia." *New York Times,* January 29.

_____. 1998b. "Bad News, Silver Lining for Indonesian Laborers." *New York Time*s, February 6.

_____. 1998c. "As Boom Fails, Malaysia Sends Migrants Home." *New York Times,* April 9.

Myers, Norman. 1993. *Ultimate Security: The Environmental Basis of Political Stability*. New York: W.W. Norton & Company.

NAFTA and Inter-American Trade Monitor 1995. "Mexico and Latin America: Poverty and Integration." Institute for Agriculture and Trade Policy (based on a study by the Institute for Economic Research at the National Autonomous University of Mexico), December.

Nash, Nathaniel C. 1994. "Latin Economic Speedup Leaves Poor in the Dust." *New York Times,* September 7.

New York Times. 1998. "Korean Jobless Rate Reaches 12-Year High," April 28.

Oldeman, L.R. International Soil Reference and Information Centre, Wageningen, Netherlands, private communications with Gary Gardner, Worldwatch Institute, September 21, 1995 and April 12, 1996.

Population Reference Bureau. 1995. "1995 World Population Data Sheet" (wallchart). Washington, D.C., May.

Postel, Sandra. 1992. *Last Oasis: Facing Water Scarcity*. New York: W.W. Norton & Company.

_____. 1996. "Forging a Sustainable Water Strategy," in Lester R. Brown et al., *State of the World 1996*. New York: W.W. Norton & Company.

Prendergast, John. 1992. "Greenwars in Sudan." *Center Focus*, July.

Refugees Magazine. 1997. "UNHCR at a Glance," No. 109.

Renner, Michael. 1997a. "Chiapas: An Uprising Born of Despair." *World Watch*, January/February.

_____. 1997b. "Small Arms, Big Impact: The Next Challenge of Disarmament." *Worldwatch Paper 137*. Washington, D.C.: Worldwatch Institute, October.

Sims, Calvin. 1996. "Workers Bitter at Pay and Privatization Tie Up Bolivian Capital," *New York Times*, March 28.

_____. 1997. "Rising Outcry in Argentina as Economic Reform Pinches." *New York Times*, June 1.

Smil, Vaclav. 1992. "Environmental Change as a Source of Conflict and Economic Losses in China," in *Occasional Paper No. 2*. Project on Environmental Change and Acute Conflict. American Academy of Arts and Sciences and University of Toronto, December.

_____. 1995. "China's Environmental Refugees: Causes, Dimensions and Risks of an Emerging Problem," in Kurt R. Spillmann and Günther Bächler, eds., *Environmental Crisis: Regional Conflicts and Ways of Cooperation. Occasional Paper No. 14.* Bern, Switzerland: Environment and Conflicts Project (ENCOP). September.

Specter, Michael. 1997. "Protesting Privation, Millions of Russian Workers Strike." *New York Times*, March 28.

Stevens, William K. 1995. "Scientists Say Earth's Warming Could Set Off Wide Disruptions." *New York Times*, September 18.

Stichele, Myriam Vander. 1996. "Trade Liberalization--The Other Side of the Coin." *Development & Cooperation*, January/February.

Suhrke, Astri. 1993. "Pressure Points: Environmental Degradation, Migration and Conflict," in *Occasional Paper No. 3.* Project on Environmental Change and Acute Conflict. American Academy of Arts and Sciences and University of Toronto, March.

Suliman, Mohamed. 1992. "Civil War in Sudan: The Impact of Ecological Degradation." *Occasional Paper No. 4.* Bern, Switzerland: Environment and Conflicts Project (ENCOP). December.

Uchitelle, Louis. 1994. "U.S. Corporations Expanding Abroad at a Quicker Pace."

New York Times, July 25.

United Nations. 1994. *World Social Situation in the 1990s.* New York: United Nations.

_____. 1996. "Global Report on Human Settlements Reveals: 500 Million Homeless or Poorly Housed in Cities Worldwide," in the APC electronic conference igc.unic.news, February 9.

United Nations Development Programme, (UNDP). 1991. *Human Development Report 1991.* New York: Oxford University Press.

_____. 1994. *Human Development Report 1994.* New York: Oxford University Press.

_____. 1995. *Human Development Report 1995.* New York: Oxford University Press.

UN Department of Public Information (UNDPI). 1996a. "Poverty and Development: An (Im)balance Sheet." February.

_____. 1996b. "The Geography of Poverty." March.

_____. 1996c. "The Faces of Poverty," March.

UN Economic Commission for Latin America and the Caribbean (ECLAC). 1994. *Social Panorama of Latin America 1994.* Santiago, Chile.

UN High Commissioner for Refugees (UNHCR). 1995. *The State of the World's Refugees 1995.* New York: Oxford University Press.

UN Research Institute for Social Development (UNRISD). 1994. *States of Disarray: The Social Effects of Globalization*. Geneva.

U.S. Department of Agriculture, Economic Research Service. 1995. "Production, Supply, and Distribution" (electronic database). Washington, D.C., November.

U.S. Government Printing Office. 1993. *Development Assistance, Export Promotion, and Environmental Technology--Background Paper, OTA-BP-ITE-107*. Washington, D.C.: U.S. Government Printing Office, OTA, August.

Watson, Robert T., Marufu C. Zinyowera, and Richard H. Moss (eds.). 1996. *Climate Change 1995: Impacts, Adaptations and Mitigation of Climate Change: Scientific-Technical Analyses.* Cambridge: Cambridge University Press, for the Intergovernmental Panel on Climate Change.

Whitney, Craig R. 1998. "French Jobless Find the World is Harsher." *New York Times,* March 19.

World Bank. 1995. *World Development Report 1995*. New York: Oxford University Press.

World Resources Institute. 1996. *World Resources 1996-97: The Urban Environment*. New York: Oxford University Press.